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ABSTRACT

Although logotherapy has been generally seen as a therapeutic technique, its usefulness in other areas cannot be underestimated. This paper examines museum education from a theoretical "logos" perspective and from a practical application of effective museum utilization for students. While museums will never replace schools in the formal education process, they can provide invaluable supplemental services. Relying on real objects, not words, to stimulate creativity and inquiry, museums allow for relatively simple transfer to real world experiences. Long involved in traditional education, museums remain a voluntary place to learn; current literature indicates new approaches to learning through inquiry and hands-on offer experiences are not usually found in schools. Museums need to be more educationally accountable, teaching exhibits must have performance objectives, and museum/school staffs should strengthen relations to allow students full benefit of their experiences. A 37-item reference list is included. (DB)

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Human Interactions in Education: The Museum as an Experiential Learning Center

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Abstract

Although logotherapy has been generally seen as a therapeutic technique, its usefulness in other areas cannot be underestimated. This paper examines museum education from a theoretical "logos" perspective and a practical application to effective museum utilization for school students. While museums will never replace schools in the formal education process, they can provide invaluable supplemental services. Relying on real objects, not words, to stimulate creativity and inquiry, they allow for relatively simple transfer to real world experiences. Long involved in traditional education, museums remain a voluntary place to learn, but current literature indicates, while this may exist, new approaches to learning through inquiry and hands-on offer experiences not usually found in the school. Museums need to be more educationally accountable, teaching exhibits must have performance objectives, and museum/school staffs should strengthen relations to allow the student full benefit of his/her experience.

Human Interactions in Education: The Museum as an Experiential Learning Center

> The existential philosophy of Victor Frankl places great emphasis on the past. Frankl (1978) states: For if everything is stored in the past forever, it is important to decide in the present what we wish to eternalize by making it part of the past. This is the secret of creativity: that we are moving something from the nothingness of the future into the 'being past.' Human responsibleness thus rests on the 'activism of the future' on one's choosing possibilities from the future and on the 'optimism of the past.'

Thus, we are confronted daily with decisions which affect us. Frankl, at some point, decided to make "Man's Search for Meaning" a reality and by so writing it, has carved for himself a place forever in immortality. This is exemplified in the following counseling session with Anna.

> Imagine there are about a dozen great things, works which wait to be created by Anna and there is no one who could achieve and accomplish it but Anna. No one can replace her in this endeavor. They will be your creations, and if you don't create them, they will remain uncreated forever. If you create them, however, even the devil will be powerless to annihilate them. Then you have rescued them by bringing

> them to reality. And even if your works were smashed to pieces in the museum of the past, as I should like to call it, they will remain forever. From this museum nothing can be stolen since nothing we have done in the past can be undone (Frankl, 1969).

We all have our own "museums of the past"--our creations, our sufferings and our joys. There is however a different type of museum that exists--a building, an edifice which does, in fact, store the works of the creative--the art treasures, the paintings, the statues and artifacts from prior days.

Thus an individual artist, such as Goethe, may have: "worked seven years on the completion of the second part of Faust. Finally in 1832, he sealed the manuscript; two months later he died" (Frankl, 1967).

Here, a person not only delivers a work of art to his own museum of the past, he delivers his work to the museum of mankind.

The world has many examples of great museums--the Louvre in Paris, the Hermitage in Leningrad, the Prado in Madrid, the Deutches Museum in Munchen, and the National Gallery in Washington. Furthermore, there are edifices which are both museums and monuments to mankind. The Sun King, Louis XIII's "Versailles," the Taj Mahal, Neuschwanstein, Linderhof, the Sistine Chapel, and Notre Dame Cathedral are all examples of religious and historical sites with a rich historical background,

full of information relative to that culture and society. The importance of a museum or library is embodied in the short anecdote where Frankl (1969) reminds us of what happened in the ghetto of Theresienstadt:

> A transport with about 1,000 young people was scheduled to leave the next morning. When morning came, it turned out that over night the ghetto library had been burglarized. Each of the youngsters--who were doomed to death in the concentration camp of Auschwitz--had provided himself with a couple of books by his favorite poet or novelist or scientist and had hidden the books in his rucksack.

These youngsters had all attempted to transcend their perceived destiny or fate. So also, does not a museum transcend mankind? Are not the best works of art stored in the museums of the world? Do we not protect our treasures of the past for future generations? And yet does our educational system use these assets for future artists and creators? The authors are both involved in forms of museum education. The first author has constructed a hands-on and experiential museum project for teaching natural history to elementary students in Nebraska, while the second author has promoted museum education through the Cooper Foundation and the Nebraska Committee for the Humanities.

This paper will address the educational, theoretical and practical usages of museums and their collections.

Museums: An Experience in Learning

Museums are beginning to take a serious look at their role as educators. They have long been involved in traditional education but a review of current literature indicates why this may exist, new approaches to learning through inquiry, hands-on and more non-traditional design is an increasingly effective experience. A museum's greatest value to children and adults is to stimulate their imagination, to arouse their curiosity, and to give them a new appreciation for their world, both past and present.

Newman (1979) identified a museum as a place dedicated to the pursuit of learning as opposed to the conventional definition that states a museum is an institution devoted to the care and display of objects of lasting value. That it does, but the emphasis herein is directed to the museum's role in education, especially learning that takes place in this out-of-school setting. Though every museum appears different, the role is the same in that it disseminates information about its discipline to many types of people.

The Director of Chicago's Museum of Science and Industry, Victor Danilov, reported that museum visitors tend to feel a museum is an educational experience if not an educational institution (1982). Teachers are not alone in their mission to convince students that learning need not be drudgery but it

becomes the challenge of those who involve themselves in the commitment to education. There is no "product" in museum education unless awareness, curiosity or excitement is a valid reason for entering the field. Awareness that through the centuries artists and scientists have used the processes of "creativity" and "inquiry" to serve the special needs of people (Mayer, 1977; Rowe, 1977). According to Knott (1980) educational materials must be developed to reflect this sensitivity and need. In an interview with Dr. Gordon Davis (1983), Director, Illinois State University Museum, he states, "Museum people ask teachers what they would like to see/do/get out of the museum experience, but has anyone asked the students?" To eliminate drudgery and foster creativity and inquiry, museum education programs would do well to begin planning by addressing that question.

In order to appreciate the importance of exhibit planning and the variables considered in order to obtain maximum educational value, it is necessary to address visual learning, cognitive experiences and perception. Attention to these concepts and their application to exhibits has helped museums develop their potential to educate.

Investigating a phenomena or marveling at a work of art is traditionally seen as an intensely personal experience (one inherently full of personal meaning). This is an area in which educators cannot teach--the aesthetic pleasure--only foster

conditions that can provide a meaningful encounter (Caston, 1980; Housen, 1980). Museum professionals have enthusiastically endorsed the museum for providing a type of visual education that, according to Rawlins (1978), was largely ignored, not only by the public school curriculum, but by a word-and-sound oriented society. Visual encounters strengthen almost all learning experiences. Visual encounters with exhibits are imagination provoking in themselves (Griesemer, 1980). However, these encounters need to be reinforced to promote learning (Griesemer, 1981).

Often following instruction, a student's conceptual understanding of a topic remains unchanged (Ministrell, 1983). Teachers and students should be conscious of the tools of thought, e.g. casual explanation--categorization, and then provide a place to discuss, to investigate, and to organize the phenomena experienced. Neill (1978) cites Oppenheimer when stating, "'. . . both science and art start with an awareness of simple patterns in experience, whether within oneself or as part of a relationship with the external world." Participation in a museum experience can both teach and allow application of a wide range of cognitive skills every teacher would aspire to develop in his/her students. Traditionally science has emphasized the cognitive domain thus encouraging some students to gain a narrow and sometimes erroneous understanding of scientific theories. Birnie (1978) and Griesemer

(1980) advocate the use of affective objects to reach cognitive goals. If cognitive and effective experiences gained by the museum student can be linked to the internal and external experiences that occur daily, then the informal mode of learning that is possible in museums is invaluable. It is important to identify ways in which opportunities for this type of learning--in the museum--can be enhanced. Davis (1977) suggests that one possible way is through participatory activities and sensory experiences.

Exploration of a museum appeals to another human quality, perception. How do we see and sense our world? What is there to notice? Do we fail to notice because we don't know how? Do our eyes deceive us? How? If we learned to notice, would it lead to understanding and perhaps discovery (Neill, 1978)? In a museum a student can ask a pertinent question, experience or see that phenomena, experience or see how it relates to their daily life and then, with this new awareness, recognize and understand it better (Kimche, 1978). Learning is enhanced when the learner is involved in self-discovery. Mayer (1977) cites Jerome Bruner from Toward a Theory of Instruction, "It is far more interesting to learn the facts after one has tried to figure them out for oneself."

The concept of experiential learning, or "hands-on," is not new or complicated. It provides the opportunity to enter into an

experience that stimulates our imagination and provides the pleasurable reinforcement mentioned earlier. Object manipulation, or play, has long been recognized as a source of discovery, imagination and creativity. Birdd (1982) and Griesemer (1981) feel that educators need to erase the stigma that play is nonproductive and devote some classroom time to creative play that is serious yet pleasurable. Such play encourages curiosity and thus becomes a tool in the stimulation of learning.

The object is the most obvious instrument of the museum's resources. The museum, unlike other educational institutions, can rely on authentic objects, not words or reproductions, as the learning tool. To learn about objects can be valid and interesting, but to learn from can stimulate even high levels of learning, e.g. analysis, synthesis and evaluation. Objects can be used to present more than facts to the student, they provide an affective element as well. The museum visit can complement or supplement what is taught in the classroom (Davis, 1977). In an aesthetic way it can provide exposure to collections and experiences not obtainable at the school. Wood (1967) agrees with that statement but additionally remarks that the teacher needs to discover they do not need to teach in the classroom alone.

Frank Oppenheimer (1982), Director of San Francisco's Exploratorium, and respected museum educator, is concerned that children today have too little chance for exploration. Therefore,

museums become places in which exploration can take place, inspiring greater interest in their work. He further suggests that museums are "voluntary, participatory, entertaining and necessary artificially created environments for learning." Oppenheimer (1980) states that museums represent places where a balance exists between opposing needs and that in this environment the student can favor personal choice, individualized and direct contact with existing phenomena much more than a text and lecture-based education in the schools. Danilov (1976) suggested those museums that are dynamic and encourage visitor participation appear to have greater appeal to students than conventional static displays. People like to touch objects; they want to see how things work. O'Toole (1981) and Wright (1980) found that upper elementary students, participating in a hands-on experience were in the Piagetian concrete operations level. They were aware, curious, thinking, and informed children whose experiences they were the least likely to forget.

One of the most powerful principles to emerge from the field of behavioral psychology and its application to instruction has been the idea that active participation heightens the acquisition and retention of information. This principle should include the word "relevant," for it is not any kind of participation that will assist in learning, but participation in a relevant activity that is consistent with the objectives of the exhibit (Shettel, 1973).

Eason (1976) and Griesemer (1980) explain that participatory does not necessarily refer to exhibits with push/start buttons or audio tapes, but those in which one can touch, feel, smell or taste; exhibits that actively involve the visitor in discovering information by their own participation in the demonstration process. There is a lack of self-consciousness in museums that allow for touching, manipulating or experimenting (Neill, 1978). The object in museum education is to foster exploration and investigation about the meaning of the past. Danvers (1979) stated that to really understand an object and do a thorough analysis of it, the student must handle it, measure it, draw it, or research it. Kimche (1978) reiterates a Chinese proverb that aptly reinforces the concept of experiential learning. "I hear and I forget, I see and I remember, I do and I understand."

A successful learning experience in a museum should involve growth and differentiation of an already existing behavioral state (Mayer, 1977), thus requiring experiences that are less compatible with existing interests, needs and skills. Learning must evoke a sense of wonder, excitement, and curiosity, and this provides positive and interesting consequences for the learner. Past experiences and attitudes will determine how active a role a student takes in learning during a "planned" learning experience. Carefully designed curricular materials and advance organizers can

be effective instructional strategies for learning (Gennaro, 1981).

The museum visit should not end with the bus ride back to school. The transfer of learning, and this is the fundamental concept for retention, will not necessarily take place unless particular care is taken to ensure that it will (Newman, 1979). Neill (1978) tells us that Oppenheimer believed that learners learn more when they become teachers. Students could exhibit their new knowledge by sharing their conclusions with others in either a formal or informal fashion.

It does not come as a surprise to discover that both in and out of the museum the classroom teacher's attitude is the primary factor in determining the success or failure of a museum visit (Danilov, 1976; Davis, 1983; DeRose, 1979; Lacey & Agar, 1980; Mayer, 1977; Rowe, 1977). As long as teachers are not prepared to use the facilitates, the museum field trip will seldom be more than a free day out of school, for a trip to the museum without any pre-planning and follow-up has little, if any, educational value. Educational departments of the museum must work closely with the school in order to originate and develop museum education so that it is oriented to museum collections as well as to student's needs (Lacey & Agar, 1980; Ott, 1980). If museums are to expand this educational role, then correspondingly they should design a course to instruct teachers in effective and measurable

ways to use the museum as a resource. This course could be an option in teacher education programs.

The blame for ineffective communication and relations between schools and museums does not rest with the schools alone. Newsom (1978) indicates that museums ought to be more educationally accountable than they are and Shettel (1973) emphasizes that teaching exhibits must have explicitly stated objectives. Gathering of experimental and control data regarding museum education must be initiated by educators and researchers. The student is observed and the changes in what they can do before and after exposure to the exhibit constitute achievement (Eason, 1976; Screven, 1969). The artificial nature of control and experimental groups is not compatible with groups from schools--or even the casual museum visitor, for that matter--trying to make effective use of their field trip money. Students are influenced by the mere fact they are in a museum. Exhibits can be, and are, an educational medium, and as such are subject to the same appraisal that applies to other educational institutions. Museums need to test and revise their materials before they are ready for public exposure. If the material is found to be unsatisfactory, then the process must be repeated and the product re-tested (Matthai, 1974; Shettel, 1973).

Learning in the museum should be formalized and clearly defined to the extent that museum educators, volunteers, and

classroom teachers are aware of the variety and extent of learning which can occur in this setting (Davis, 1977). Museum education requires a sensitive and an imaginative grasp of community values, interests and needs.

Children learn a great deal outside of the school and in so doing bring to the schooling process a continually growing storehouse of information and ideas. By bringing these children into contact with their past, works of art, and scientific phenomena we enrich their cultural background and consequently their vocabulary. Oppenheimer (cited in Danilov, 1982) states that "no one ever flunks a museum." It is for this reason that Gatto (1979) advocates that the enthusiasm and energy of elementary and junior-high students should be exploited and channeled as a catalyst for productive activities in a museum setting.

Museums have come a long way in recognition of their role as an educational institution. Continued efforts should be made to strengthen museum-school relationships by demonstrating they share the same concerns, instructional techniques, and knowledge of conceptual levels of learning. The degree to which teachers and museum educators understand each other's goals, affects the degree to which students will benefit from their museum visit.

Object manipulation, for inquiry and exploration, should continue to be used. Assuming a significant positive outcome,

participatory and hands-on exhibits should be extended to classrooms in the form of outreach programs.

While museums will never replace schools in the formal education process, they can provide invaluable supplemental services just as logo therapy is often seen as a supplement to traditional therapy.

Research in this topic expose other issues to be studied. Additional research and practical suggestions for fostering positive museum-school relations and communication could be developed as well as publications that emphasize planning as part of the preparation for a museum field trip. There is a definite lack of research available on secondary schools and museum programs just as there is a noticeable lack of secondary students visiting the institution. While applauding the merits of non-traditional learning in a museum setting, complacency should not be allowed to develop. Therefore, continued formulative evaluation of these approaches should be a high priority for educators in both sides of the issue.

Museums contain a wealth of knowledge and through improved programs of education the public will come to not only appreciate their resources but applaud their worth.

Certainly, just as the museum of the past is an important construct in logo therapy, so too are museums and libraries, important repositories of the historical past and ancillary aids

to education. Educators can use museums to guide students in finding both individual and cultural and societal meanings in their own search for a global meaning in life.

Frankl (1969) has "discerned three chief groups of values . . . the first is what he gives to the world in terms of his creation; the second is what he takes from the world in terms of encounters and experiences, and the third is the stand he takes to his predicament in case he must face a fate which he cannot change."

A museum offers these opportunities man may offer to his/her "museum of the past" (or the present) his/her creations. Man may also take from MUSEUMS, his/her encounter and experiences with the past and other creative works. And finally a museum may help man deal with the ultimate predicament--the facing of the fate of being man and of being transitory. Thus, museums can help in "man's search for meaning."

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